

# ANALYSIS

## ENTITIES AND ATTRIBUTES

### **1.Courses**

- course\_id(pk)
- course\_name
- category
- course\_description
- duration

### **2.Students**

- student\_id(pk)
- student\_name
- student\_age
- student\_contact
- student\_date of birth

### **3.Instructors**

- instructor\_id(pk)
- instructor\_name
- instructor\_contact
- instructor\_address
- courses taught(FK)

### **4.Enrollement**

- student\_id(FK)
- course\_id(FK)
- enrollment\_date
- status

## **5.Schedules**

- schedule\_id(PK)
- course\_id(FK)
- start\_time
- end\_time

## **RELATIONSHIPS AND CARDINALITIES**

### **1. Student ↔ Enrollment (1-to-Many)**

- A student can have many enrollments (1-to-Many).
- An enrollment belongs to one student (Many-to-1).

### **2. Course ↔ Enrollment (1-to-Many)**

- A course can have many enrollments (1-to-Many).
- An enrollment is linked to one course (Many-to-1).

### **3. Instructor ↔ Course (1-to-Many)**

- An instructor can teach courses (1-to-Many).
- A course is assigned to one instructor (Many-to-1).

### **4. Course ↔ Schedule (1-to-Many)**

- A course can have many schedules (1-to-Many).
- A schedule belongs to one course (Many-to-1).

